

# United States Patent and Trademark Office

UNITED STATES BEPARIMENT OF COMMERCE United States Paten and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. [Box 1860 Alexandria, Virginia 22313-1450 www.uspio.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/826,118	01/09/2001	Urbain Alfred Von der Embse	4398	
7590 12/08/2006 URBAIN A. VON DER EMBER 7323 W. 85TH STREET WESTCHESTER, CA 90045-2444			EXAMINER	
		DO, CHAT C		
			ART UNIT	PAPER NUMBER
	,		2193	
			DATE MAILED: 12/08/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
Office Action Summary	09/826,118	VON DER EMBSE, URBAIN ALFRED				
Office Action Summary	Examiner	Art Unit				
	Chat C. Do	2193				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status		·				
1) Responsive to communication(s) filed on <u>06 October 2006</u> .						
2a)⊠ This action is <b>FINAL</b> . 2b)☐ This	This action is <b>FINAL</b> . 2b) ☐ This action is non-final.					
3) Since this application is in condition for allowan	☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)  Claim(s) 7-12 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration.  5)  Claim(s) is/are allowed.  6)  Claim(s) 7-12 is/are rejected.  7)  Claim(s) is/are objected to.  8)  Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9) The specification is objected to by the Examiner.						
10)⊠ The drawing(s) filed on <u>06 October 2006</u> is/are: a) accepted or b)⊠ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119	·					
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
		•				
Attachment(s)	· .					
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date.						
3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date 07/05/2006.  5) Notice of Informal Patent Application 6) Other:						

Art Unit: 2193

## **DETAILED ACTION**

- 1. This communication is responsive to Amendment filed 10/06/2006.
- 2. Claims 7-12 are pending in this application. Claim 7 is independent claims. In Amendment, claims 1-6 are cancelled and claims 7-12 are newly added. This Office Action is made final.

# Information Disclosure Statement

3. The information disclosure statement filed 07/05/2006 fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because it does not provide a copy of all the non-patent literature documents, particularly the references by McClellan et al., Vaidyanathan et al., T. Blu, and K. C. Ho et al.. It has been placed in the application file, but the information referred to therein has not been considered as to the merits. Applicant is advised that the date of any resubmission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609.05(a).

#### **Drawings**

4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the limitations in independent claim 7

must be shown or clearly point out the detail in the drawings corresponding to the limitations cited in the claim or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

## Claim Objections

5. Claims 7-12 are objected to because of the following informalities:

Re claim 7, the applicant should:

- Place the acronym the parenthesis like "least-squares (LS)" in lines 1-2 of the claim;
- Define the range of the limitation "steps 3, 4, etc.";

Art Unit: 2193

Page 4

- Write out the full name for FIR acronym as "finite impulse response (FIR)"; and
- Re-write the statement in line 1 of page 3 in claim 7.

Re claims 8-12, the applicant should correct in these claims with similar objections cited above.

Further for claim 12, it is an incomplete claim which is missing a period (.) at the end of the claim. In addition, it is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claims 7-11 as cited throughout the claim. See MPEP § 608.01(n). Accordingly, the claim 12 has not been further treated on the merits.

In general, appropriate correction is required for all similar objections throughout the claims 7-12.

## Claim Rejections - 35 USC § 112

- 6. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 7. Claims 7-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Re claim 7, there are so many limitations (e.g. said mother wavelet frequency response in line 23-24, said LS error metrics in line 34....) lack of antecedence basis because they are not previously define or mention in the claim or its preceding claims. In

Art Unit: 2193

addition, the limitations cited in the claim are so unclear and mis-descriptive because the limitations are just defining the properties of wavelet rather than the step(s) or procedure(s) to design a digital mother wavelets at baseband for multi-resolution waveforms and filters as clearly defined in the pre-amble to the claim.

Similarly, claims 8-12 have the same rejections. The applicant is required to identify and correct all the indefinite limitations cited throughout claims 7-12.

## Claim Rejections - 35 USC § 101

8. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

9. Claims 7-12 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 7-12 cite a method for designing a digital mother Wavelets according to a mathematical formula. In order for claims to be statutory, claims must include a physical practical application or a concrete, useful, and tangible result. However, claims 7-12 merely disclose steps and properties of the digital mother Wavelets without disclosing its practical application or the tangible result. Therefore, claims 7-12 are directed to non-statutory subject matter.

## Response to Amendment

10. The amendment filed 10/06/2006 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall

Art Unit: 2193

introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

Most limitations cited in claims 7-12 are not clearly defined or found in the original disclosure.

The inserted portion in page 43-44 of the specification.

Applicant is required to cancel the new matter or to clearly in detail point out where in the original specification support the added material in the reply to this Office Action.

#### Response to Arguments

- 11. Applicant's arguments with respect to claims 7-12 have been considered but are moot in view of the new ground(s) of rejection.
- 12. Applicant should submit an argument under the heading "Remarks" pointing out disagreements with the examiner's contentions. Applicant must also discuss the references applied against the claims, explaining how the claims avoid the references or distinguish from them.
- 13. An examination of this application reveals that applicant is unfamiliar with patent prosecution procedure. While an inventor may prosecute the application, lack of skill in this field usually acts as a liability in affording the maximum protection for the invention disclosed. Applicant is advised to secure the services of a registered patent attorney or agent to prosecute the application, since the value of a patent is largely dependent upon skilled preparation and prosecution. The Office cannot aid in selecting an attorney or agent.

Art Unit: 2193

A listing of registered patent attorneys and agents is available on the USPTO Internet web site http://www.uspto.gov in the Site Index under "Attorney and Agent Roster." Applicants may also obtain a list of registered patent attorneys and agents located in their area by writing to the Mail Stop OED, Director of the U. S. Patent and Trademark Office, PO Box 1450, Alexandria, VA 22313-1450.

#### Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chat C. Do whose telephone number is (571) 272-3721. The examiner can normally be reached on M => F from 7:00 AM to 5:30 PM.

Art Unit: 2193

Page 8

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chat C. Do Examiner Art Unit 2193

December 5, 2006

MENG-AL T. AN

SUPERVISORY PATENT EXAMINER